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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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(12) **United States Patent**
Canteri

(10) **Patent No.:** **US 6,634,831 B2**
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(54) **METHOD FOR INCREASING THE BEARING CAPACITY OF FOUNDATION SOILS FOR BUILT STRUCTURES**

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(51) **Int. Cl.⁷** **E02D 3/12**

(52) **U.S. Cl.** **405/264; 52/742.13; 405/263**

(58) **Field of Search** **405/263, 264, 405/266, 270, 258.1, 271, 269; 52/742.13, 742.14**

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(57) **ABSTRACT**

A method for increasing the bearing capacity of foundation soils for built structures consisting of providing a plurality of holes spaced from each other deep in the soil, and injecting into the soil, through the holes, a substance which expands as a consequence of a chemical reaction, with a potential increase in volume of at least five times the volume of the substance before expansion. The expansion of the substance injected into the soil produces compaction of the contiguous soil.

23 Claims, 6 Drawing Sheets

